

## **RIGHTS-OF-WAY ACCESSIBILITY UPDATE FROM THE US ACCESS BOARD**

**January 2008**

Agencies and design professionals looking for guidance on designing new or altered public sidewalks, street crossings, and related pedestrian facilities should consider the US Access Board's draft Public Rights-of-Way Accessibility Guidelines (PROWAG) as a best practice where the current ADA standard, ADAAG, is silent or inapplicable, according to a February 2006 Federal Highway Administration (FHWA) Memorandum (see <http://www.fhwa.dot.gov/environment/bikeped/prwaa.htm>).

Because title II of the ADA, which covers State and local governments, requires accessible new construction and alterations rather than adherence to a standard, covered entities must provide usability even if there are no standards for a specific facility type. Although relevant provisions of the current ADA Standards for Accessible Design (the Board's 1991 ADAAG) can serve as a measure of compliance and safe harbor for designers, they were not developed for rights-of-way use and are difficult to apply. The Board's 2005 PROWAG draft tailors ADAAG to the public pedestrian environment and thus can provide more detailed guidance on usability. When completed, PROWAG, which provides scoping and technical provisions for pedestrian access to sidewalks and streets, including crosswalks, curb ramps, street furnishings, pedestrian signals, parking, roundabouts, and other features, will serve as the basis for new DOJ and DOT standards.

The PROWAG draft is posted to the Access Board website at <http://www.access-board.gov/news/row-draft.htm>. It incorporates many of the industry and consumer recommendations submitted in comment to the Board's June 2002 draft. Board staff are currently developing the regulatory assessment required as the next step in rulemaking before a Notice of Proposed Rulemaking (NPRM) can be published. The regulatory assessment, a type of cost/benefit analysis, is focused on 5 key cost issues identified with industry input; these are: 1/pedestrian signals at multi-lane roundabout crossings; 2/'tabling' at sidewalk intersections to provide level landings and crosswalks; 3/temporary pedestrian routes; 4/integrated accessible pedestrian signals, and 5/the new 24-inch detectable warnings specification. Industry organizations – APWA, ITE, and AASHTO – will help the Board assess cost effects. With the completion of the regulatory assessment, the NPRM can be published for a last round of public comment. A Final Rule will follow.

Technical assistance on pedestrian design is available on the Board's toll-free line at 800/872-2253. A new publication on sidewalk and street alterations has been posted at [www.access-board.gov/news/rowalterations-guide.htm](http://www.access-board.gov/news/rowalterations-guide.htm); print copies are also available. Other website ([www.access-board.gov/pubs.htm](http://www.access-board.gov/pubs.htm)) resources include:

- >Accessible Rights-of-Way: A Design Guide= (1999);
- >Detectable Warnings: a Synthesis on U.S. and International Practice= (2000);
- 'Interfacing APS with Traffic Controllers' (2003); and
- 'Pedestrian Access to Modern Roundabouts' (2003)
- 4-part video on 'Accessible Sidewalks: Design Issues' (1997)

To order (free) DVD copies of the video and print copies of the Alterations publication, call 202/272-0011 or email [baes@access-board.gov](mailto:baes@access-board.gov).

New FHWA research undertaken for the Board has been posted to the Board's 'Research' page at <http://www.access-board.gov/research/project-list.htm>:

- 'Contrast in Detectable Warnings' (2006); and
- 'Roundabout Signalization' (2006).

FY 2008 research will soon begin to refine roundabout signalization options.

Information on current and proposed provisions for detectable warnings can be found at [www.access-board.gov/adaag/dws/update.htm](http://www.access-board.gov/adaag/dws/update.htm). FHWA policy also requires detectable warnings; see [www.fhwa.dot.gov/environment/bikeped/dwm.htm](http://www.fhwa.dot.gov/environment/bikeped/dwm.htm). Other information on detectable warnings and accessible pedestrian signals, including listings of manufacturers and useful powerpoint presentations, is available from Accessible Design for the Blind at [www.accessforblind.org](http://www.accessforblind.org). Key NCHRP-funded research on APS ([www.walkinginfo.org/aps/](http://www.walkinginfo.org/aps/)) is posted to the website of the Pedestrian and Bicycle Information Center (PBIC), hosted at the Highway Safety Research Center at North Carolina State University. FHWA's "Designing Sidewalks and Trails for Access" can be read at [www.fhwa.dot.gov/environment/sidewalk2/](http://www.fhwa.dot.gov/environment/sidewalk2/).

ITE resources include a toolbox on intersection accessibility posted to their website at [www.ite.org/accessible/](http://www.ite.org/accessible/) and a 4-part on-line course on accessible pedestrian facilities at [www.ite.org/emodules/source/orders/index.cfm](http://www.ite.org/emodules/source/orders/index.cfm).

The Association of Pedestrian and Bicycle Professionals (APBP) offers an 8- to 12-hour course on designing accessible pedestrian facilities; contact [kit@apbp.org](mailto:kit@apbp.org).

Enforcement of access requirements in the public right-of-way is generally referred to the US Department of Transportation, which also has an enforcement responsibility under the Rehabilitation Act of 1973 ('504'). See the September 2006 FHWA memorandum at [www.fhwa.dot.gov/civilrights/ada\\_memo\\_clarificationa.htm](http://www.fhwa.dot.gov/civilrights/ada_memo_clarificationa.htm). For funding, consult [www.fhwa.dot.gov/hep/flexfund.htm](http://www.fhwa.dot.gov/hep/flexfund.htm).

The US Department of Justice also maintains a website ([www.ada.gov](http://www.ada.gov)) and a technical assistance hotline at 800/514-0301 (voice and tty) for questions about

the ADA title II implementing regulations that cover State and local governments, including accessibility obligations for existing facilities and for agency programs, services, and activities. The title II regulation and preamble can be viewed at [www.ada.gov/reg2.html](http://www.ada.gov/reg2.html). An ADA toolkit is posted at [www.ada.gov/pcatoolkit/toolkitmain.htm](http://www.ada.gov/pcatoolkit/toolkitmain.htm).

For more information, contact Access Board PROW staff leader Scott Windley at 202/272-0025 (v) or -0082 (tty) or [windley@access-board.gov](mailto:windley@access-board.gov).

# A Checklist for Accessible Sidewalks and Street Crossings

The Americans with Disabilities Act (ADA) requires that new and altered facilities be accessible. Title II of the ADA covers sidewalk and street construction and transit accessibility and references the ADA Accessibility Guidelines (ADAAG) or the Uniform Federal Accessibility Standards (UFAS) for new construction and alterations undertaken by or on behalf of a state or local government. The Department of Justice (DOJ) title II regulation specifically requires that curb ramps be provided when sidewalks or streets are newly constructed or altered. (Requirements for **existing** pedestrian networks not otherwise being altered are also included in the DOJ regulation, available on line at [www.ada.gov/reg2.html](http://www.ada.gov/reg2.html)).

The ADA Accessibility Guidelines ([www.access-board.gov/adaag/html/adaag.htm](http://www.access-board.gov/adaag/html/adaag.htm)) include standards for site development that can be adapted to **new construction and alterations** in the public right-of-way. Draft guidelines developed specifically for right-of-way use are posted to the Board's website at <http://www.access-board.gov/prowac/index.htm>.



## CURB RAMPS

***A curb ramp or other sloped area is required wherever a new or altered pedestrian walkway crosses a curb or other barrier to a street.*** Similarly, a curb ramp is required wherever a new or altered street crosses a pedestrian walkway. A curb ramp may be perpendicular to the curb it cuts or parallel with the sidewalk. Other designs may also comply, including parallel ramps (sidewalks that ramp down), and combination ramps (sidewalks that ramp down to a lesser curb height, with a short perpendicular curb ramp to the street). Also consider: blended or at-grade connections or raised crossings that connect at sidewalk level.

***The running slope of a new curb ramp should not exceed 1 in 12 (8.33%).*** Steeper ramps are not usable by many pedestrians in wheelchairs and scooters. Cross slope must be limited to 1:48 (2%).

***A level landing should be provided for turning and bypassing curb ramps.*** Landings must be at least 48 inches (1220 mm) deep with a cross slope of no more than 1:48 (2%). The landing will be at the top of a perpendicular curb ramp, at the bottom of a parallel ramp, or in the middle of a combined ramp (the side flares of a curb ramp are not intended for accessible travel). Landings are not required at blended transitions, although cross-slope limits will produce them at intersections.

***The foot of a curb ramp should be contained within the crosswalk markings.*** Pedestrians who use wheelchairs should not be directed outside the crosswalk or into an active travel lane in order to cross stopped traffic. If a diagonal ramp is used, a 48-inch long (1220 mm) bottom landing must be provided in the space between the curb radius and curb line extensions.

***The transition from curb ramp to gutter should be flush.*** Lips are not permitted. Gutter counterslope in the line of travel should not exceed 1 in 20 (5%) and should connect smoothly with other elements of the pedestrian network.

***The boundary between the sidewalk and street should be detectable underfoot.*** A 24-inch strip of truncated dome (detectable warning) material should be provided the full width of the ramp or other uncurbed connection to the crosswalk so that pedestrians do not inadvertently travel into the street.

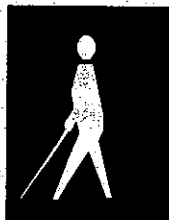


## SIDEWALKS

**A sidewalk should provide for two-way circulation.** A 60-inch (1525-mm) walkway can accommodate turns and passing space and is recommended as the minimum width for urban sidewalks and for sidewalks immediately adjacent to curbs. In areas with 48-inch-wide (915 mm) walkways, passing space (60x60 inches/1525x1525 mm) should be provided at intervals of 200 ft (61 m) maximum. A 48-inch (915 mm) width allows travel with a service animal or sighted guide. Maneuvering space is also necessary at turns, at entrances and doors, at street furniture such as drinking fountains and telephones, and at pedestrian pushbuttons.

**The cross slope of a sidewalk should not exceed 1:48 (2%).** Excessive cross slope requires additional energy to counteract and tends to direct wheelchair users into the street, particularly when it is wet, icy, or snowy underfoot. At driveways there should be a minimum 36-inch (915 mm) wide passage with a cross slope of no more than 1:48 (2%). Corners at intersections should comply in both directions, since the running slope of one walkway will be the cross slope of another.

**Street furniture, plantings, poles and standards, and other fixed items should not protrude into travel routes.** Pedestrians with vision impairments can detect objects mounted on walls or posts if they are installed so that the leading edge is less than 27 inches (685 mm) above the sidewalk. Items mounted above this height should not project more than 4 inches (100 mm) into any circulation route. Particular care needs to be taken to ensure that temporary signage and construction barriers do not impede pedestrian travel.



## STREET CROSSINGS

**Consider the information needs of blind and low-vision pedestrians at intersections.** When pedestrian signals are provided, their crossing and timing information should be available to all users via APS.

**Insufficient crossing time may be a barrier for some pedestrians.** Every pedestrian cohort should be expected to contain some walkers whose rate of travel is less than 3.5 feet per second.



## TEMPORARY WORK

**Temporary work should be accessible.** Where construction blocks a public sidewalk for more than a short time, an alternate accessible route should be provided. Temporary events and facilities should also meet accessibility criteria.



## OTHER PEDESTRIAN FEATURES

**Pedestrian facilities on and along sidewalks must be accessible.** Signal actuating buttons, drinking fountains, telephones, kiosks, and other pedestrian elements should meet accessibility criteria for approach and maneuvering space, reach range, and operation.

The development of new public rights-of-way guidelines is underway and can be monitored on the U.S. Access Board's website at <http://www.access-board.gov/prowac/index.htm>. The Board also maintains a toll-free technical assistance line at 800/872-2253 (V): 800/993-2822 (TTY).